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APPENDIX IV

| LAND USE/LAND COVER | AREAS IN HUC-12 SUBWATERSHEDS (ACRES) | | | | |
|------------------------------|---------------------------------------|---------------|---------------|---------------|--------------|
| | 0101 | 0102 | 0103 | 0104 | 0105 |
| Bare Rock/Sand/Clay | 218 | 74 | 633 | 155 | 2 |
| Deciduous Forest | 10,898 | 11,640 | 10,553 | 20,372 | 8,386 |
| Developed Open Space | 858 | 628 | 478 | 1,204 | 314 |
| Evergreen Forest | 732 | 581 | 707 | 972 | 125 |
| Grassland/Herbaceous | 1,071 | 588 | 1,404 | 2,264 | 149 |
| High Intensity Development | 17 | | | 3 | |
| Low Intensity Development | 378 | 172 | 273 | 458 | 22 |
| Medium Intensity Development | 91 | 20 | 50 | 63 | |
| Mixed Forest | 3,006 | 1,743 | 2,799 | 2,494 | 552 |
| Open Water | 211 | 26 | 227 | 49 | |
| Pasture/Hay | 2,070 | 1,146 | 4,191 | 3,636 | 66 |
| Row Crops | 44 | 40 | 235 | 240 | 10 |
| Shrub/Scrub | | | 2 | 3 | |
| Woody Wetlands | 1 | 1 | | 2 | |
| Total | 19,595 | 16,660 | 21,553 | 31,916 | 9,627 |

Table A4-1a.

| LAND USE/LAND COVER | AREAS IN HUC-12 SUBWATERSHEDS (ACRES) | | | | |
|------------------------------|---------------------------------------|---------------|---------------|---------------|---------------|
| | 0106 | 0107 | 0108 | 0201 | 0202 |
| Bare Rock/Sand/Clay | 64 | 131 | 17 | 340 | 10 |
| Deciduous Forest | 33,787 | 9,834 | 8,199 | 26,999 | 28,797 |
| Developed Open Space | 1,509 | 691 | 705 | 1,860 | 1,653 |
| Evergreen Forest | 465 | 469 | 166 | 249 | 214 |
| Grassland/Herbaceous | 706 | 1,721 | 343 | 962 | 218 |
| High Intensity Development | | 75 | 6 | 5 | |
| Low Intensity Development | 139 | 310 | 125 | 476 | 137 |
| Medium Intensity Development | 8 | 280 | 40 | 39 | 2 |
| Mixed Forest | 641 | 640 | 305 | 753 | 467 |
| Open Water | 375 | 46 | 3 | 30 | 37 |
| Pasture/Hay | 3,141 | 1,112 | 1,733 | 1,121 | 1,670 |
| Row Crops | 789 | 36 | 391 | 4,138 | 725 |
| Shrub/Scrub | 72 | 4 | 4 | 14 | 23 |
| Woody Wetlands | 75 | 2 | 3 | | 6 |
| Total | 41,772 | 15,352 | 12,041 | 36,984 | 33,960 |

Table A4-1b.

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| LAND USE/LAND COVER | AREAS IN HUC-12 SUBWATERSHEDS (ACRES) | | | | |
|------------------------------|---------------------------------------|---------------|---------------|---------------|---------------|
| | 0203 | 0401 | 0402 | 0403 | 0404 |
| Bare Rock/Sand/Clay | 5 | 147 | | 34 | 35 |
| Deciduous Forest | 12,055 | 19,910 | 11,268 | 25,608 | 6,935 |
| Developed Open Space | 1,229 | 789 | 93 | 2,677 | 731 |
| Evergreen Forest | 368 | 662 | 292 | 492 | 54 |
| Grassland/Herbaceous | 152 | 711 | 47 | 562 | 257 |
| High Intensity Development | | 2 | | 10 | 17 |
| Low Intensity Development | 555 | 194 | 11 | 776 | 391 |
| Medium Intensity Development | 24 | 28 | | 129 | 109 |
| Mixed Forest | 516 | 2,554 | 699 | 741 | 356 |
| Open Water | 163 | 43 | | 86 | 2,235 |
| Pasture/Hay | 6,369 | 997 | 688 | 8,848 | 3,141 |
| Row Crops | 3,258 | 180 | 104 | 3,654 | 1,130 |
| Shrub/Scrub | 83 | 30 | | 101 | 92 |
| Woody Wetlands | 46 | 4 | | 12 | 10 |
| Total | 24,823 | 26,250 | 13,203 | 43,731 | 15,492 |

Table A4-1c.

| LAND USE/LAND COVER | AREAS IN HUC-12 SUBWATERSHEDS (ACRES) | | | | |
|------------------------------|---------------------------------------|---------------|------------|---------------|--------------|
| | 0405* | 0501 | 0502 | 0503 | 0504 |
| Bare Rock/Sand/Clay | | 29 | | 9 | 2 |
| Deciduous Forest | | 17,748 | 143 | 10,211 | 4,725 |
| Developed Open Space | | 718 | | 521 | 465 |
| Evergreen Forest | | 605 | 8 | 96 | 106 |
| Grassland/Herbaceous | | 517 | | 137 | 231 |
| High Intensity Development | | 10 | | | 24 |
| Low Intensity Development | | 179 | | 209 | 108 |
| Medium Intensity Development | | 36 | | 19 | 52 |
| Mixed Forest | | 259 | 2 | 74 | 69 |
| Open Water | | 10,282 | 230 | 1,326 | 125 |
| Pasture/Hay | | 1,696 | | 365 | 983 |
| Row Crops | | 337 | | 1,932 | 41 |
| Shrub/Scrub | | 42 | | 27 | 30 |
| Woody Wetlands | | 23 | | 23 | 8 |
| Total | | 32,481 | 382 | 14,949 | 6,968 |

Table A4-1d.

Table A4-1a-d. Land Use Distribution in the Obey River Watershed by HUC-12. Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years. *, No data available.

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| HYDROLOGIC SOIL GROUPS |
|---|
| GROUP A SOILS have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained. |
| GROUP B SOILS have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures. |
| GROUP C SOILS have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture. |
| GROUP D SOILS have high runoff potential, very low infiltration rates, and consist chiefly of clay soils. |

Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS. Soils are grouped into four hydrologic soil groups that describe a soil's permeability and, therefore, its susceptibility to runoff.

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| STATION | HUC-10 | AGENCY | NAME | AREA (SQ MILES) | LOW FLOW (CFS) | | |
|-----------------|------------|--------|----------------------|--------------------|----------------|------|------|
| | | | | | 1Q10 | 7Q10 | 3Q20 |
| 03414500 | 0513010501 | USGS | East Fork Obey River | 202 | | | |
| 03414230 | 0513010501 | USGS | East Fork Obey River | | | | |
| 03415000 | 0513010502 | USGS | West Fork Obey River | 115 | | | |
| 03414700 | 0513010502 | USGS | Pubncheon Camp Creek | | | | |
| 03414680 | 0513010502 | USGS | West Fork Obey River | | | | |
| 03416000 | 0513010504 | USGS | Wolf River | 106 | | | |
| 363212085272201 | 0513010505 | USACOE | Obey River | | | | |

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in the Obey River Watershed. USGS, United States Geological Survey; TVA, Tennessee Valley Authority. Additional information may be found at:
<http://nwis.waterdata.usgs.gov/tn/nwis/discharge>

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| AGENCY | STATION | LOCATION | HUC-12 |
|---------|--------------|---------------------------------|--------------|
| TDECWPC | MEADO011.9CU | Meadow Creek @ RM 11.9 | 051301050101 |
| TDECWPC | CHARL000.7OV | Charlie Branch @ RM 0.7 | 051301050102 |
| TDECWPC | EFOBE039.0OV | East Fork Obey River @ RM 39.0 | 051301050102 |
| TDECWPC | EFOBE039.6OV | East Fork Obey River @ RM 39.6 | 051301050102 |
| TDECWPC | HURRI003.1FE | Hurricane Creek @ RM 3.1 | 051301050102 |
| TDECWPC | LHURR001.2OV | Little Hurricane @ RM 1.2 | 051301050103 |
| TDECWPC | LOOPE001.0OV | Looper Branch @ RM 1.0 | 051301050103 |
| TDECWPC | EFOBE025.8FE | East Fork Obey River @ RM 25.8 | 051301050104 |
| TDECWPC | LCOVE1T1.0FE | UT to Lints Cove @ RM 1.0 | 051301050104 |
| TDECWPC | LLAUR000.4FE | Little Laurel Creek @ RM 0.4 | 051301050104 |
| TDECWPC | BINDI000.6FE | Big Indian Creek @ RM 0.6 | 051301050106 |
| TDECWPC | EFOBE012.6FE | East Fork Obey River @ RM 12.6 | 051301050106 |
| TDECWPC | LCRAB001.9FE | Little Crab Creek @ RM 1.9 | 051301050106 |
| TDECWPC | ROCKC004.7FE | Rockcastle Creek @ RM 4.7 | 051301050107 |
| TDECWPC | ROCKC04.75FE | Rockcastle Creek @ RM 4.75 | 051301050107 |
| TDECWPC | POPLA001.3FE | Poplar Cove Creek @ RM 1.3 | 051301050108 |
| TDECWPC | CUB000.7OV | Cub Creek @ RM 0.7 | 051301050202 |
| TDECWPC | PCAMP000.7OV | Puncheon Camp Creek @ RM 0.7 | 051301050202 |
| TDECWPC | WFOBE009.5OV | West Fk Obey River @ RM 9.5 | 051301050202 |
| TDECWPC | WFOBE014.6OV | West Fork Obey @ RM 14.6 | 051301050202 |
| TDECWPC | COWAN000.1OV | Cowan Branch @ RM 0.1 | 051301050203 |
| TDECWPC | NETTL002.5OV | Nettlecarrier Creek @ RM 2.5 | 051301050203 |
| TDECWPC | WFOBE008.0OV | West Fork Obey @ RM 8.0 | 051301050203 |
| TDECWPC | BEAGL006.1OV | Big Eagle Creek @ RM 6.1 | 051301050302 |
| TDECWPC | BIG000.1OV | Big Branch @ RM 0.1 | 051301050302 |
| TDECWPC | DELK000.3FE | Delk Creek @ RM 0.3 | 051301050401 |
| TDECWPC | WOLF040.7FE | Wolf River @ RM 40.7 | 051301050401 |
| TDECWPC | RFWOL000.2FE | Rotten Fork Wolf River @ RM 0.2 | 051301050402 |
| TDECWPC | CANEY000.8FE | Caney Creek @ RM 0.8 | 051301050403 |
| TDECWPC | LICK001.1PI | Lick Creek @ RM 1.1 | 051301050403 |
| TDECWPC | TOWN000.1PI | Town Branch @ RM 0.1 | 051301050403 |
| TDECWPC | WOLF022.2PI | Wolf River @ RM 22.2 | 051301050403 |
| TDECWPC | OBEY000.1CY | Obey River @ RM 0.1 | 051301050501 |

Table A4-4. STORET Water Quality Monitoring Stations in the Obey River Watershed.
TDECWPC, Tennessee Department of Environment and Conservation Division of Water Pollution Control; UT, Unnamed Tributary.

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| FACILITY NUMBER | FACILITY NAME | SIC | SIC NAME | MADI | WATERBODY | HUC-12 |
|-----------------|--|------|-------------------------------|-------|------------------------------------|--------------|
| TN0062634 | Jamestown STP | 4952 | Sewerage System | Major | Rockcastle Creek @ RM 4.75 | 051301050107 |
| TN0021377 | Obey River Rec Area "A" | 4952 | Sewerage System | Major | Obey River @ RM 45.9 and @ RM 45.5 | 051301050301 |
| TN0021393 | USACOE Dale Hollow Lake | 4952 | Sewerage System | Major | Obey River @ RM 31.4 | 051301050303 |
| | | | | | | |
| TN0026085 | Star Point Resort | 4952 | Sewerage System | Major | Jouette Creek Embayment @ RM 1.4 | 051301050303 |
| TN0062626 | Byrdstown STP | 4952 | Sewerage System | Major | UT @ RM 0.4 to Town Creek @ RM 0.1 | 051301050403 |
| TN0058033 | Cedar Hill Resort | 4952 | Sewerage System | Major | Obey River @ RM 10.3 | 051301050501 |
| TN0021423 | USACOE Dale Hollow Dam Shop | 4952 | Sewerage System | Major | Obey River @ RM 7.0 and @ RM 6.6 | 051301050504 |
| TN0004332 | USFWS Dale Hollow National Fish Hatchery | 0921 | Fish Hatcheries and Preserves | Major | Dry Branch @ RM 0.1 | 051301050504 |
| TN0068098 | Dale Hollow Hydro Power Plant | 4911 | Electric Services | Major | Obey River @ RM 7.3 | 051301050504 |

Table A4-5. NPDES Permittees in the Obey River Watershed. SIC, Standard Industrial Classification; MADI, Major Discharge Indicator; UT, Unnamed Tributary.

| FACILITY NUMBER | PERMITEE | COUNTY | LIVESTOCK | WATERBODY | HUC-12 |
|-----------------|------------------------|----------|-----------|-------------------|--------------|
| TNA000008 | Jams Threet | Fentress | Poultry | Poplar Cove Creek | 051301050107 |
| TNA000064 | Franklin Jim Bledsoe | Fentress | Poultry | Poplar Cove Creek | 051301050108 |
| TNA000016 | Rich's Poultry | Pickett | Poultry | Lick Creek | 051301050401 |
| TNA000015 | Koger Mountain Poultry | Pickett | Poultry | Lick Creek | 051301050403 |
| TNA000029 | Mountain View Farm | Pickett | Poultry | Dale Hollow Lake | 051301050403 |
| TNA000111 | Tim West Family Farms | Pickett | Poultry | Begley Branch | 051301050403 |
| TNA000112 | West Farms | Pickett | Poultry | Begley Branch | 051301050403 |
| TNA000121 | Daniels Poultry Farm | Clay | Poultry | Poor Branch | 051301050501 |

Table A4-6. CAFO Sites in the Tennessee Portion of the Obey River Watershed.

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| FACILITY NUMBER | PERMITEE | SIC | SIC NAME | WATERBODY | HUC-12 |
|------------------------|--|------------|-------------------------------------|--|---------------|
| TN072362 | Sand Products, LLC (Mineral Springs Mine) | 1442 | Construction Sand and Gravel | Mineral Springs Branch | 051301050101 |
| TN071188 | Tennessee Mining, Inc. (Cumberland Mine #1) | 1221 | Bituminous Coal Underground Mining | Lints Cove | 051301050104 |
| TN071897 | Hood Coal Corporation (Tar Gap Mine) | 1221 | Bituminous Coal Underground Mining | UT to East Fork Obey River | 051301050106 |
| TN053007 | Tennessee Mining, Inc. (Grimsley Tipple) | 1221 | Bituminous Coal Underground Mining | Fern camp Creek | 051301050107 |
| TN071498 | Tennessee Mining, Inc. (Cumberland Mine #2) | 1221 | Bituminous Coal Underground Mining | Fern Camp Creek | 051301050107 |
| TN063487 | Livingston Limestone Co. (Monterey Limestone) | 1422 | Crushed and Broken Limestone | UT to Sinking Cane Hollow | 051301050201 |
| TN063444 | Livingston Limestone Co. (Quarry/Processing Facility) | 1422 | Crushed and Broken Limestone | Big Eagle Creek | 051301050302 |
| TN063525 | Frogge and Williams Stone (Wright Quarry) | 1422 | Crushed and Broken Limestone | UT to Wolf River | 051301050401 |
| TN072401 | Fentress Co. Highway Dept. (County Hwy Dept. Quarry) | 1422 | Crushed and Broken Limestone | Dry Branch | 051301050401 |
| TN076333 | LoJac Enterprises (Monterey Sand) | 1442 | Construction Sand and Gravel Mining | Garrison Branch, UT to Garrison Branch | 050113010501 |
| TN063479 | Rogers Group, Incorporated (Celina Quarry) | 1422 | Crushed and Broken Limestone | Obey River | 051301050504 |

Table A4-7. Active Permitted Mining Sites in the Obey River Watershed. SIC, Standard Industrial Classification; UT, Unnamed Tributary.

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| FACILITY NUMBER | FACILITY NAME | SECTOR | RECEIVING STREAM | AREA* | HUC-12 |
|------------------------|----------------------------------|---------------|-------------------------|--------------|---------------|
| TNR051151 | Mullins Lumber Company | P | Dale Hollow Lake | 15 | 051301050301 |
| TNR054580 | Royal Oak Enterprises, Inc. | C, A | Meadow Creek | 51.57 | 051301050101 |
| TNR055945 | Perdue Farms | U | Monterey City Lake | 10.617 | 051301050201 |
| TNR056438 | Pickett County Sanitary Landfill | L | UT to Town Branch | 10.77 | 051301050301 |
| TNR051275 | Allons sawmills, Incorporated | A | Little eagle Creek | 23.75 | 051301050302 |
| TNR054233 | Cooper Recycling, LLC | N | Big Eagle Creek | 3.88 | 051301050302 |
| TNR054030 | Doubletop Storage Area | N, P | Chapman Branch | 5.6 | 051301050403 |
| TNR055915 | Ronnie Smith | J | Day Creek | 2 | 051301050403 |
| TNR053267 | APAC-Celina Plant | D | Obey River | 3 | 051301050504 |

Table A4-8. Active Permitted TMSP Facilities in the Obey River Watershed. Area, acres of property associated with industrial activity; UT, Unnamed Tributary. Sector details may be found in Table A4-11.

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| SECTOR | TMSP SECTOR NAME |
|---------------|---|
| A | Timber Products Facilities |
| AA | Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware |
| AB | Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery |
| AC | Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods |
| AD | Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required) |
| AE | Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required) |
| B | Paper and Allied Products Manufacturing Facilities |
| C | Chemical and Allied Products Manufacturing Facilities |
| D | Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities |
| E | Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities |
| F | Primary Metals Facilities |
| G | Metal Mines (Ore Mining and Dressing) (RESERVED) |
| H | Inactive Coal Mines and Inactive Coal Mining-Related Facilities |
| I | Oil or Gas Extraction Facilities |
| J | Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities |
| K | Hazardous Waste Treatment Storage or Disposal Facilities |
| L | Landfills and Land Application Sites |
| M | Automobile Salvage Yards |
| N | Scrap Recycling and Waste and Recycling Facilities |
| O | Steam Electric Power Generating Facilities |
| P | Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities |
| Q | Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities |
| R | Ship or Boat Building and Repair Yards |
| S | Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities |
| T | Wastewater Treatment Works |
| U | Food and Kindred Products Facilities |
| V | Textile Mills, Apparel and other Fabric Product Manufacturing Facilities |
| W | Furniture and Fixture Manufacturing Facilities |
| X | Printing and Platemaking Facilities |
| Y | Rubber and Miscellaneous Plastic Product Manufacturing Facilities |
| Z | Leather Tanning and Finishing Facilities |

Table A4-9. TMSP Sectors and Descriptions.